

AMENDMENTS TO THE SPECIFICATION

Please make the following amendments to the specification.

Please replace paragraph 0146 with the following paragraph:

Reference is now made to Fig. 12A which is an annotated sequence of an EST comprising a novel gene detected by the gene detection system of the present invention. Fig. 12A shows the nucleotide sequence of a known human non-protein coding EST (Expressed Sequence Tag), identified as EST72223 (SEQ ID NO: 45571). It is appreciated that the sequence of this EST comprises sequences of one known miRNA gene, identified as MIR98, and of one novel GAM gene, referred to here as GAM24, detected by the bioinformatic gene detection system of the present invention, described hereinabove with reference to Fig. 2.

Please replace paragraph 0148 with the following paragraph:

Reference is now made to Fig. 12C. A Northern blot analysis of EST72223 and MIR-98 transfections were performed, subsequently marking RNA by the MIR-98 and GAM24 probes. Left, Northern reacted with MIR-98, Right, Northern reacted with GAM24. The molecular Sizes of EST72223, MIR-98 and GAM24 are indicated by arrows. Hela are control cells that have not been introduced to exogenous RNA. EST and MIR-98 Transfections are RNA obtained from Hela transfected with EST72223 and MIR-98, respectively. MIR-98 and EST are the transcripts used predicted ~~dicted~~ precursor hairpins by using a DIG RNA labeling kit (Roche Molecular Biochemicals) according to the manufacturer's ~~manufacture's~~ protocol. Briefly, PCR products with T7 promoter at the 5' end or T3 promoter at the 3' end were prepared from each DNA in order to use it as a template to prepare sense and antisense transcripts, respectively. MIR-98 was amplified using EST72223 as a template ~~templet~~ with T7miR98 forward primer: 5'-TAATACGACTCACTATAGGGTGAGGTAGTAAGTTGTA TT GTT-3' (SEQ ID NO: 45574) and T3miR98 ~~revse~~ reverse primer: 5'-AATTAACCCTCACTAAAGGGAAAGTAGTA AGTTGTATAGTT-3' (SEQ ID NO: 45575). EST72223 was amplified with T7-EST72223 forward primer: 5'-TAATAC GACTCACTATAGGCCCTTATTAGAGGATTCTGCT-3' (SEQ ID NO: 45576) and T3-EST72223 reverse primer: 5'-AATTAACCCTCACTAAAGGTTTTCTGAGACAGAGT-3' (SEQ ID NO: 45577). Bet-4 was amplified using EST72223 as a template ~~templet~~ with Bet-4 forward primer: 5'-GAGGCAGGAGAATGCTTGA-3' (SEQ ID NO: 45578) and

T3-EST72223 reverse primer: 5'-AATTAACCCTCACTAAAGGCCTGAGACAGAGTCTTGCTC-3" (SEQ ID NO: 45579). The PCR products were cleaned and used for DIG-labeled or unlabeled transcription reactions with the appropriate polymerase. For transfection experiments, for the transfection experiment. The results indicate that EST72223, when transfected into Hela cells, is cut yielding known miRNA gene MIR-98 and novel miRNA gene GAM24.

Please replace paragraph 0157 with the following paragraph:

Reference is now made to Fig. 13A which is an annotated sequence of an EST comprising a novel gene detected by the gene detection system of the present invention. Fig. 13A shows the nucleotide sequence of a known human non-protein coding EST (Expressed Sequence Tag), identified as EST 7929020 (SEQ ID NO: 45572). It is appreciated that the sequence of this EST comprises sequences of two novel GAM genes, referred to here as GAM23 and GAM25, detected by the bioinformatic gene detection system of the present invention, described hereinabove with reference to Fig. 2.

Please replace paragraph 0160 with the following paragraph:

Reference is now made to Fig. 14A which is an annotated sequence of an EST comprising a novel gene detected by the gene detection system of the present invention. Fig. 14A shows the nucleotide sequence of a known human non-protein coding EST (Expressed Sequence Tag), identified as EST 1388749 (SEQ ID NO: 45573). It is appreciated that the sequence of this EST comprises sequence of a novel GAM gene, referred to here as GAM26, detected by the bioinformatic gene detection system of the present invention, described hereinabove with reference to Fig. 2.